The Shoeflower (*Hibiscus rosa-sinensis* L.) is common to most gardens in the tropics and is a serviceable hedge plant. Recently it has attained eminence in some countries owing to the marvellous variety of flower colour now available as a result of crossing of its varieties and of certain species but little has been written on the subject.

The common or garden shoeflower (*Sapaththu Mal* S.) probably originated in China but it is now in cultivation throughout the tropics. It is a large spreading shrub to a small tree with fairly large, thin, shiny green leaves and with rose-red flowers from 4 to 5 inches across. As an individual plant it is of average merit, but since it stands pruning admirably it is commonly used as a hedge plant.

The flowers form a red dye which is used locally for staining purposes and the flower petals are also used in jellies. It is stated that the flowers are used for dyeing hair and for blacking shoes, hence the local name of the " shoe-black " plant.

As a show plant, however, the type species is not often used since so many varieties and crosses have now become available which have large, single, and double flowers of many different shades.

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## Horticultural Varieties and Crosses of Hibiscus Rosa-sinensis.

The scope of hybridizing and crossing these fine flowers is immense, but little has so far been attempted locally. This is perhaps due to some extent to the paucity of indigenous species and to the limited range of colour among them.

There are twelve species indigenous to Ceylon, four of which are annuals, five are perennial herbs, one a scandent semi-shrub, and two are small trees. Of these species, eight have yellow flowers with purple centres, one white, one white to deep pink, one pink, and one pink to purple. *Hibiscus collinus* Roxb. (pale pink or purple), *Hibiscus vitifolius* L. (sulphur yellow with purple centre), and *Hibiscus angulosus* Mast. with its variety (primrose yellow, and white to deep pink) are the only plants of any horticultural merit in themselves. They could however quite well be used as a basis of hybridization for multiplying the many varieties of *Hibiscus* now in cultivation, provided they are fertile in crossing, but generally speaking hybrids from *Hibiscus schizopetalus* and *Hibiscus rosa-sinensis* and crossings of the varieties of the latter among themselves would be the most probable source of further good forms.

The garden varieties of ornamenal *Hibiscus* in Ceylon do not by nature produce seed or do so very rarely, so that without artificial aid little seed is produced. The extent to which this occurs locally has yet to be exactly ascertained. If other local species of *Hibiscus* are used for crossing purposes satisfactory fertilization should be fairly well assured since these are self-fertile. When the operation of crossing is undertaken the stigmas and pollen must be dry. The flower normally opens in the morning and the best time to attempt artificial fertilization is during the morning hours.

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## Propagation and Cultivation.

The ornamental species and certain of the varieties at present grown in Ceylon can be propagated without difficulty, usually by means of cuttings. Others, particularly the superior Hawaiian varieties, do not grow satisfactorily from cuttings but can be propagated by budding, using the patch or the T and inverted T methods.

The cuttings should be obtained from well matured and rounded shoots, ½ inch or a little more in diameter, and 8 to 10 inch sections should be used. A propagating bed with soil of a light sandy nature should be prepared and the cuttings inserted to a depth of 3 eyes or so—generally about 3 inches—in the soil. At Peradeniya the beds are made in the open and the cuttings shaded for the first week or so after insertion. After 4 to 5 weeks the cuttings will have formed sufficient roots to allow potting into bamboo pots for the convenience of later transport, if necessary. The cutting will have formed sufficient root system for planting out at about 2 months from insertion of cuttings. Since the propagating bed is of very sandy soil, water